Founded as the Official News Organ of Technology



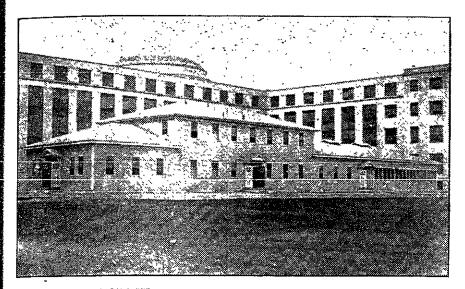
A Record of Continuous News Service for 36 Years

vol. 38 No. 46

CAMBRIDGE, MASS., SATURDAY, SEPT. 7, 1918

Price Three Cents

Four Aviators Are Treated Daily In The New Hospital



NEW TECHNOLOGY NAVAL AVIATION SCHOOL DISPENSARY

SHORT time ago work was begun on the erection of the new Technology Naval Aviation School Dispensary, which is situated in the court between the educational buildings 2, 4. and 8. The construction work progressed very rapidly, and on M.I.T. WAR SERVICE AUXILIARY August 15th the building was first used for its intended purpose. The firm of Stone and Webster, which constructed the Institute buildings, planned and built the Dispensary.

The man in charge of this much needed addition to the Aviation School is R. H. McMeans, Assistant Surgeon, U. S. Navy, a gradmate of the University of Texas with the Class of 1917. He is bandages for the Allies. For the pur-honored by the degrees D. A. and M. D. His assistants are Louis chase of the materials, however, special H. Segar, Assistant Surgeon, U. S. Navy, who is only here tempor-funds must be provided, since its princiairly; Dwight Cowles, Assistant Surgeon, U. S. N. R. F., who is a pal work is maintained by designated

geon, U. S. N. R. F.

The dispensary, a structure forty feet by two hundred feet in overhead charges for rent, light, heat, size, will accommodate thirty-six patients easily, and is generally or salaries, and money received for this well filled. There are numerous sick calls every morning, and during the day there is an average of four sick calls; two from the Main Ship, and two from the Receiving Ship. In addition to the Medical Staff there are fourteen hospital corpsmen in constant attendance upon the patients.

The work at the dispensary is mostly of the sanitary and prophylactic type. Whenever a new group of men is sent to the Avia-war relief. tion School they are at once detailed to the Dispensary where they undergo a severe physical examination and are vaccinated for ty phoid, paratyphoid, and smallpox. It is here, also, that the identi- and the director, Mrs. W. T. Sedgwick, heation tags are made out. These are made of metal and on one stated. Contributions, large or small, side register the name, rate, service, and date of enlistment, while will be welcomed and acknowledged by

Whn the representative of the THE TECH visited the Dispensary recently he was very graciously received by Dr. McMeans who howed him over the entire building. On the first floor is the very arge, roomy, and airy ward in which thirty-six men can be accommodated. Leading from this ward, on the north side is a long, notification of the next of kin of officers screened-in porch for the use of convalescents. In addition to these and men reported in the daily casualty are two examination rooms of ample size, and two isolation rooms, lists because of the changed system of which can easily accommodate six patients, Dr. McMeans office, a soon as it is possible to compare the dispensary, a detail office, the dental department in charge of Dr. sussman, a kitchen, and its accessories, and numerous baths, linen the Adjutant General's Office, with the closets and locker rooms. On the second floor of the building there card-indexed catalogue at the Statistical are two smaller wards, rooms for the corpsmen, and a lecture hall Dission, the usual private telegraphic for the latter. Here there are also numerous baths, and the identifi-

URUGUAY COMMISSION

Visits Institute on Trip of Inspection

Uruguay's visiting commission was hic plant at Lynn and the United Shoe dachinery Company at Beverly, the

00 o'clock Thursday, Dr. Baltasar nal Corps may be requested. Brum, Uruguayan Minister for Foreign Affairs, and his party were soon started brough the social and sightseeing pro-Fam arranged for their entertainment Mayor Peters, who met them at the

(Continued on page 3)

TECHNOLOGY DRAFTEES MAY BE TRANSFERRED TO SIGNAL CORPS

A communication from the Chief Signal Officer to the Administratino of the Institute seeks to secure material available for the Signal Corps. Its text is to there was danger of seriously deferring the effect that, if previous to this information any of the Technology stugiven a hearty welcome by the City of dents who are qualified in their train-Boston last Thursday. After inspecting ing for service in the Signal Corps are Technology, Harvard, the General Electric ordered to report for military service by their local draft boards, it is requested that steps be taken to ascertain their Commission was given a dinner at the Copley-Plaza Hotel and left Boston for Sent forward to the Chief Signal Officer military addresses immediately on their graph across the Continent. Arriving in Boston from New York in order that their transfer to the Sig-

> my share in the war?" The share of newspaper. To prevent unequal press the civilian who cannot fight is to do competition, the lists are sent subject to what President Wilson asks him to do release dates. The newspapers are un--to pledge himself to save to the ut- der pledge to make no use of the informost of his ability and with his savings | mation contained in these lists prior to to buy War Savings Stamps.

2430 MEN IN SERVICE

Monthly Report of Auxiliary So Announces

In its monthly count of the former Technology students in service, the M. I. T. War Service Auxiliary reports that there is a regular rate of increase of men in service of about two a day, while from the military material, officers are commissioned at a somewhat slower rate, perhaps about one and threequarters a day. There were in service on September 1st, 2430, against 2368 on August 1st, with 1536 afficers against 1488 a month ago. Men are going across about as fast as new ones are added, there being now 704 along the fighting line in France and Italy, with 492 men in the Navy, an increase of seventeen during the month. The list of men deceased has been increased from forty-one to fortythree. Other figures of Q. T. C. Ambulance Corps, cited for bravery, etc., remain as before.

NEEDS FUNDS FOR MATERIALS

After supplying the needs of Technology men in service, the M. I. T. War Service Auxiliary has some time and energy which it would be glad to devote to the making of hospital garments and graduate of Tufts Medcial School: and Jacob Sussman, Dental Sur-brothers-in-arms. The workroom is in full and regular operation; there are no purpose will be spent solely for materials for hospital garments, as indicated above. No surgical gauze dressings are made. Donations of hospital garments from unrestricted gifts, such as are now greatly desired, amounting in value to more than \$2000, have already been made to the British and the Italian

An appeal is hereby made by the on the reverse side of the tag, the fingerprints of the enlisted man are Caroline C. Bigelow, treasurer, Tech. nology workroom, 491 Boylston street.

NEW PUBLICATION SYSTEM FOR U. S. CASUALTY LIST

. There will be no delay in the private

There will be a delay or from three to five days in the public announcements of casualties in the daily press. This was made necessary when the several press associations of the country notified the War Department that the transmission by them of the recently enlarged casualty lists so interfered with the transmission of other war news that either one or the other, and the Committee on Public Information was requested to devise a means of independent delivery to the press. To meet the emergency, the Postmaster General accepted the responsibility of transmitting the complete lists daily by tele-

Three Distribution Zones

The country was divided into three zones, centering at Washington, Chicago. and San Francisco. At these points the complete casualty lists are now being Everyone should ask himself, What is duplicated and mailed to every daily the release notice dates.

NAVAL AVIATION MEET

The Technology Aviation School held another meet of its series of athletic contests last Wednesday afternoon on Tech Field and the Charles River in front of the Institute buildings. The aviators showed the usual spirited competition and the entering field was quite large in all the events. Joe Horner starred in the shot put, easily outdistancing his opponents. Frank Shea won both the running board jump and the one hundred-yard dash. The latter is the present intercollegiate and National quarter-mile title holder, while the former is the old intercollegiate shot put champion.

The summary of the feet is as fol-

Rowing, cutters, two crews representing each company—Won by 26A; second, Co. 28A; third, Co. 29A.

Running Broad Jump—Won by Frank J. Shea, Co. 28, distance 20ft 6in; sec-ond W. H. Chamberlain, Co. 27, distance 20ft. 41-2in.; third, Carson, Co. 28, distance 19ft. 6in.

Relay Race—Won by Co. 28; second. Co. 27, third, Co. 26.

Obstacle Race—Won by Newsome, Co. 28; second, Martin, Co. 28; third, Horner, Co. 29; fourth, Hanson, Co. 26.

One Hundred Yards Dash-Won by Frank J. Shea, Co. 28; second, W. H. Chamberlain, Co. 27; third, Howard, Co. 28; fourth, Murphy, Co. 28.

Shot Put-Won by Joe Horner, Co. 29, distance 48ft. 5in; second, Martin, Co. 28, distance 47ft. 3in.; third, Kesterson, Co. 26, distance 44ft. 1in.

Three-Legged Race—Won by Co. 28; second, Co. 27; third, Co. 26.

Swimming, 500 Yards Relay, 10 Men on a Team-Won by Co. 28; second, Co. 29; third, Co. 27. Pushball, 75 Men on a Side—Reds de

feated whites, 1 to 0; Whites defeated Red, 1 to 0.

Baseball-Co. 27 defeated Co. 26, to 2; Co. 28 defeated Co. 29, 9 to 5.

Institute Closes All Classes This will be the mess hall and kitchen, 160 Afternoon

school and those of the Senior and junior front line and nearer the educational freshman classes at Technology will structures of the Institute will be placed close today and the examinations will the quartermaster's department, a be held during the next week until Fri day, September 13. From that date until September 30 all the students at the Institute will have a vacation in anticipation of the coming fall term. The of the Technology School of Military exception to this date of closing is the Aeronautics. Civil Engineering Camp at East Machias, Maine, which will not break up until September 20, giving these students one week in which to visit their homes. Registration for the coming year will begin on Thursday, September 26 and the term will open on Monday, September

The Harvard-Technology School tor Health Officers, which has presented a special course for technicians in Bacteriology for the base hospitals of " U. S. Army since June and the last group of the Technology School of Military Aeronauties will also have its final exercises today.

The Technology that will open its doors on September 30 will be in many respects a very different institution from that which it has been in the past. There will be the regular courses as in past years, the Student Army Training Corps, the Naval Aviation Detachment, the school for Radio engineers, and the school for Deck Officers and that for Engine Room officers of the U.S. Ship ping Board. The S. A. T. C. is likely to include all able-bodied students, and these, being in the army, will be subject to call for service if necessary, or may be transferred to other schools it the War Department wishes to do this The regular courses will be taken in those not subject to the draft, which will include probably a couple of hundred men from foreign countries, while the other schools will be carried on in much the same way as now. There is likely to be another group of intensive courses for naval architects. In addition the Lowell School for Industrial Foremen is preparing as usual for its winter work.

Present "Wooden 'Village" At Technology Will Be Enlarged To Accommodate 1500 Men Expected to Enroll

DORMS TO HAVE SPECIAL USE

The wooden village which, with its lozen large structures, has been caring for the needs of army and navy aeronautical schools at Technology, is to be practically doubled to accommodate the students who, under the provisions of the Student Army Training Corps, will be housed and cared for at the Institute. As soon as the War Education Committee has defined the conduct of the work in instruction, the Institute authorities began construction, and practically every inch of available ground will be covered with buildings related to the work. Excavations have been made already for two of the five dormitories, or barracks, and the other constructions will be started at once, for the essential ones should be ready for occupancy by the end of September, when the registration will be effected.

Nine new structures are to be erected in the grounds along Massachusetts avenue in the rear of THE TECH office, and these are to be buildings of considerable importance. Five dormitories are to be ranged gable end to the street, occupying the present novices' drill field and baseball field, running from the present back line of building 10, or the present automobile parking space, to Vassar street. These dormitories will be in twin sections, with the lavatories between, and will have a capacity of from two hundred and fifty to three hundred, in all about fifteen hundred beds, this being the estimate of probable students enrolling in the S. A. T. C. The buildings will be 140 by 43 feet and two stories in height. Back of thems by 80 feet and 100 by 60 feet, respectively, which will be east of the barracks across the existing roadway and The various courses in the summer in front of the airdrome. On the same wooden building 120 by 40 feet. These constructions will displace the house for experimenting with poison gases, erected a couple of months ago for the use

> The administration building for the S. A. T. C. will be a structure in wood. 140 by 43 feet and one story in height, which is to extend along the Massachusetts avenue line of the Technology land in the direction of the existing buildings. Those familiar with the Institute will recognize the situation as

> > (Continued on page 3)

FORTY NAVAL CONSTRUCTORS TO COME TO STUDY AT TECH-

Within a few weeks 40 naval constructors, graduates of the United States Naval Academy for there weeks back, are coming to Boston to take the special course in naval construction at the Massachusetts Institute of Technology. This course was very much in evidence up to the time the war began. It is a very intensive one.

On and after September 23rd, the entire dormitories will be used by the Naval Aviation as barracks. The present occupants of the dormitory rooms are being notified that they must be out by Saturday, September 21st, at twelve o'clock. These changes are necessitated by the fact that the Navy will not occupy the Civil Engineering building. The Army Aviation flights have been using building one, but are getting through this week. It is the intention of the faculty to have the S. A. T. C. use the Civil Engineering building for classrooms and drafting rooms.

* H*

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The Editor-in-Chief is always responsible for the opinions expressed in the editorial columns, and the Managing Editor for the matter which appears in the

IN CHARGE THIS ISSUE

Henry L. R. Kurth '21 Night Editor

SATURDAY, SEPTEMBER 7, 1918

S. A. T. C. PREPARATIONS

THE erection of barracks for the Technology S. A. T. C. marks the beginning of a radical change in Institute life. From now on practically all Technology men will be Army men, paid. fed, clothed, and housed by Uncle Sam. The duration of their stay LIEUT. PHILIP B. GRAIGHEAD '18 at the Institute will depend on the discretion of the War Department which will also have direct supervision of their future in the tenant Craighead will probably finish service. At present it seems safe to say that the majority of the men who will come to Technology will stay here for nine months only. This means a great change in the curriculum in order that Lieutenant will be remembered by Technology. men may be given as much instruction as possible in these nine nolgians as a prominent member of the months that may be directly applied to War needs.

In order to carry through this plan, the Institute has entered upon the construction of a great system of barracks to accommodate Engineering Society, and a licutenant in approximately twelve hundred and fifty men or even more. For this the M. I. T. Cadet Corps. His home .s purpose, there are now being built five standard barracks to hold in Malden, Mass., where he prepared for two hundred and fifty men each, and a mess hall and kitchen outfit to accommodate a thousand men at a sitting. There will be eight service counters where eight lines of men may receive their food at the rate of eighty men per minute. Thus, in twelve minutes about a thousand men should be accommodated. In addition to this, a building will soon be erected for quartermaster supplies, post office, and postal exchange. Later on, there will probably be built an office of Administration on the green facing Massachusetts avenue opposite the Mechanical Engineering Laboratory where the French and To the Editor of THE TECH:-British flags are now flying.

While all this is going on, the Naval Aviation school will be taking possession of the new dormitories instead of the Civil Engineering building which the Army Aviation is now giving up. This do to assist me in getting such men and that all field commanders had been inwill enable the S. A. T. C. to make use of building one as an instruc-

tion building. All these changes wil have the effect of transforming Technology into one of the greatest war colleges in the country. We hope that Technology will maintain the great reputation as a war college that she has in the past as a training school for men of science.

\ \ ___M_I_T__

The deadest living thing in the world: the Technology under-

P. S.—The members of this body come to life about six years after graduating from the Institute.

DRAFT IS UNNECESSARY TO KEEP U. S. NAVY SUPPLIED

Extension To Sea Service Is Not Now Needed

Extension of the draft system to the navy is not regarded as necessary at

this time by the Navy Department. Rear Admiral Palmer, chief of the Bureau of Navigation, told the Senate Military Committee recently that the navy has practically all the men it needs, and that enlistement would not

approximately 430,000 men, said Ad- about the draft ages.

miral Palmer, who represented Sec. Daniels before the committee in response to a request that a representative of the navy advise the committee struction of hulls or in the installation regarding the advisability of amending the pending Administration Man-Power Bill so as to apply the draft system alike to the army and navy.

Admiral Palmer explained that enlistments in the navy just now were principally to provide crews for the merchant marine, and about 200,000 men had been accepted for that purpose.

The Navy Department is already working in conjunction with the Wai be affected by changing the army draft Department regarding enlistments, the committee was told, and would con-Enlistments in the navy now total tinue to do so, whatever might be done

Peter Masucci '15, Course VII, is now working for the H. K. Mulford Company, Biological Chemists, Philadelphia, as a chemist in the biological laboratories, and also has charge of making diphtheria and tetanus toxines, the latter for lockjaw, as well as making pollen extracts. He went to this company in 1916, after serving as Assistant State Bacteriologist for the Iowa State Board of Health.

The H. K. Mulford Company, whose pharmaceutical and drug laboratories are in Glenolden, about ten miles from Philadelphia, has 1200 horses under treatment, 300 of which are treated for anti-pneumonia scrum, the same number for meningitis serum, and the remainder for miscellaneous diseases. The majority of Masucci's work is done to supply the Army with these serums. The company is also making vaccines for typhoid, paratyphoid, cholera, dysentery and smallpox.

THE TECH has recently received news that Philip B. Craighead, who was graduated from the Institute's Civil Engincering Course with the Class of 1918, has just been commissioned a lieutenant

in the Army Air Service.

Lieutenant Craighead is now station ed at Souther Field, Georgia. a field which was named in honor of the late Henry Souther '87. Course III, who was a major, in charge of the Aircraft Engineers, Aviation Section, Signal Corps. After his training in the south, Lieu-



cast of several of the Tech Shows given during his coruse at the Technology. Craighead was also an officer of the Civil the Institute at the local schools.

COMMUNICATIONS

United States Shipping Board Emergency Fleet Corporation Philadelphia, Pa.

August 28, 1918.

The great shortage of technically trained men is felt by the shipbuilding companies and anything which you can the companies together will be appreciated.

The number of naval architects, marine engineers, hull draftsmen, engme draftsmen and other high grade tech nically trained men wanted by the leading shipyards at the present time 18 approximately 325.

With the hope that my appeal may reach some naval architects and marine engineers who are engaged in non-essential work, I am writing you. As practically all marine engineers and nava! architects are engaged, the best we can do for he shpbuilders is to try to secure structural engineers, civil. mechanical or architectual engineers who can be made useful in the shipyards.

Several of the yards are using engineers of the above kinds on the conof machinery and this field of actual construction offers excellent opportunities for young technically trained men.

If you can give me the names, addresses and qualifications of some young men who might be available aithough they are at present engaged in work less essential than shipbuilding, t will be grateful to you.

Yours respectfully,

(Signed) FRANK P. McKIBBEN '94, Supervisor of Technical Training. Education and Training Section, Louis E. Reber, Director.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY WAR SERVICE AUXILIARY

491 Boylston Street, Boston, August 29, 1918.

To the Editor of THE TECH: A letter has recently been received by the War Service Auxiliary, in which George C. Gibbs. '00, the Director of the Technology Bureau associated with the American University Union in Europe, writes:

"Our men are coming to the Bureau faster than ever, and our Tech register registered 90 men for the month of July, (which is higher than any month since

the Bureau has been opened."

The issue of THE TECH of August th stated that "no word had been heard at a late hour today from Ensign Elwood Morse Tillson of Middleboro, Mass., who was a junior officer aboard the torpedoed cruiser San Diego." This office is in receipt of a letter from Granville E. Tillson, the father of Elwood M. Tillson, who, under date of August 14th, writes as follows:

"I am glad to be able to state that the report that my son, Elwood Morse Tillson, was missing since the sinking of the San Diego is incorrect. He was among those safely landed at Hoboken, and has since been assigned to another

Sincerely yours, (Signed) MRS, A. J. GEORGE. Executive Secretary.

BATH, MAINE, August 31-(By THE TECH'S Special Correspondent.)

Mr. Charles M. Schwab, director gen eral of the Emergency Fleet Corporation, said recently, commenting on the Bath shipyards, "I found the work, as far as it came under my observation. proceeding in excellent manner. I claim that the Maine shipyards rank among the best in the East for their work. I have no fault to find with them at all."

"The only regretful thing about it is that there are not more shipyards in this state than there are. Maine with her precedence, resources in the way of shipbuilding, and her present facilities should have more shipyards."

The Technology Shipyard Workers in Bath heartily agree with Mr. Schwab in every respect. They are ready to affirm in addition that in no other shipyard in the country have the men from the Institute been so well treated.

The Technology me nworking in Bath shippards were again entertained by the directors of the Bath Iron Works, this time by Mr. W. S. Newell of the Class of 1899, Mr. C. P. Wetherbee '91, Vice-President of the Iron Works, Mrs. Newell, Mrs. Wetherbee, and other meinbers of the Iron Works.

The party of thirty went by automobiles to New Meadows Inn, a tew miles away. Here they were given an excellent shore dinner which all enjoyed. After dinner the fellows sang Tech Show and other songs. "Freddie" Britton '19 sang "Quaker Miss" and others told stories. The evening's festivities were closed by the Stein Song. Technology cheers were given and the party eturned to Bath after a very enjoyable evening.

AIRPLANE AMBULANCES TO CARRY INJURED AVIATORS

Airplane ambulances to carry injured IT WILL TELL aviators quickly from the scene of an accident to a field hospital are to be provided at all flying fields. Successful experiments with the ambulance plane YOU WHEN YOUR at Gerstner Field, Lake Charles, La., led to their introduction at nine Texas fields and the War Department announced structed to follow the example.

The planes are used specially in case of accidents at a distance, as in places difficult to reach quickly with automobile ambulances. An automobile follows the plane as rapidly as possible.

A standard training plane is used for the ambulance. The rear cockpit is cleared and enlarged sufficiently to permit a combination stretcher seat to be placed in it. The injured man is placed SEND A with his head toward the pilot and rests easily.

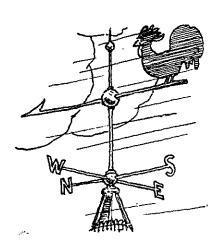
FEW CONVERT LIBERTY BONDS

Few owners of first and second Liberty bonds have converted them into bonds of the third loan, which will bear higher interest, treasury officials today announced. This can be done any time before Nov. 1, but action at this time is urged to avoid a rush in the last week.

There have been few responses also to Secretary McAdoo's appeal to railroad men to have their bonds registered to avoid loss by theft or destruction. Plans for developing self-registering bonds for the fourth Liberay loan to open September 28 have been abandoned.

Your patriotic duty is in proportion to the money you earn. The more you get the more you can, and should, invest in War Savings Stamps.

Which Way Is The Wind **Blowing** at Technology





IS THE OFFICIAL

WEATHERVANE OF THE ALUMNI

OF TECHNOLOGY.

IT GETS WIND OF

"OVER THERE."

HAPPENINGS

CLASSMATE

DOWNED HIS FIRST

BOCHE FLIER.

DOLLAR AND A

HALF FOR

SIX MONTHS'

SUBSCRIPTION.





STONE & WEBSTER

FINANCE public utility developments. BUY AND SELL securities.

DESIGN steam power stations, hydroelectric developments, transmission lines, city and interurban railways, gas plants, industrial plants and buildings.

CONSTRUCT either from our own designs or from designs of other engineers or architects.

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NEW YORK BOSTON CHICAGO

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KNOTT BUILDING **NEXT TO TECH DORMS**

We Offer You Good Food at Reasonable Prices

All Food Served Cooked

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TRY THE TAVERN

CORDAGE and TWINE



Samson Cordage Works BOSTON, MASS.

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{Power | Plant Equipment

BOSTON, MASS.

Headquarters M. I. T. War Service Auxiliary 491 Boylston St., Boston Information Bureau open daily. Workroom Tuesday, Wednesday and Thursday from 10 A. M. to 4 P. M. Everyone interested in Technology welcome, as visitor or worker.

Technology Bureau University Union 8 Rue Richelieu, Paris London Branch, London important do renu become.

NEW S. A. T. C. BARRACKS

(Continued from Page 1)

being between the laboratories of mechanical engineering and the street, the site of the future Pratt School of Naval Architecture, when conditions permit Technology to go ahead with its construction.

The requirement that the students enrolled in the S. A. T. C. shall live in barracks within the school bounds will interfere with existing methods of fraternity life, but at the Institute it is intended to make use of these buildings, of which there are two in the dormitory block, regular dormitories for students not enrolled and for special purposes such as infirmaries. All such spaces will be available also for the Naval Aviation Detachment, which is seeking | might possibly be used as a target. room for expansion, and in fact, nearly one hundred of this school are already housed in the drafting rooms of Civil Engineering, which have until now been the quarters of the Army schoe!

URUGUAY COMMISSION

(Continued from page 1)

Included in the personnel of the commission are: Dr. Baltasar Brum, foreign minister of Uruguay; Dr. Cefar Miranda, first vice-president of the House of Representatives; Dr. Javier Mendivil of the Senate, Dr. Asdrubal Delgado, financial delegate; Dr. Justo Jose Mendoza, secretary to Minister Brum; Lieutenat Juan Janosa of the Uruguayan navy; Felicciano Viera, Jr., Jose di Brum, H. Nezzara, M. Nogueira.

Americans attached to the party are Jordon Stabler of the State Department, Col. William Kelley, military aid: Commander Augustus F. Beauregard, naval aid: Joseph M. Nye and James O'Connell, special agents of the State Depart-

The reception committee included B. F. Weed of the First National Bank, F. S. Deland, Charles H. Stock of the General Electric Company, L. A. Coolidge of the United States Machinery Company, H. H. Morse of the Regal Shoe Company, Henry I. Harriman of the chamber of commerce, Frank II. Bowers of the Kidder. Peabody Co., and V. M. Cutter of the United Fruit Com-

At the Institute, where the forencen was spent in inspection, the commission was welcomed by Dean Alfred Burton, and President A. Lawrence Lowell of Harvard entertained the South Ameiicans at luncheon, the afternoon being spent at Lynn and Beverly.

Mayor Peters and high officials of the Army , Navy and City attended the dinner given in honor of the visitors on Thursday night.

OBTAINANCE OF CASUALTY NEWS

comfort and relief from anxiety to many American homes is being estabthe Bureau of Communication of the American Red Cross. It has other functions, but its efforts are to be more particularly directed toward relieving the mental strain of those who have relatives or friends in the American forces who are reported by the War Department as having been killed, wounded or missing, according to the cablegrams received from General Pershing. The War Department has always endeavored to convey such information as quickly as possible to those chiefly interested, but the work has increased to such an extent, and it is of course to be expected will grow so greatly, that was decided special arrangements should have to be made to carry it on effectively. The plan provides for a card catalog of every man in the Service not well and off duty, except men in the base hospitals and at the canwill continue to send to relatives and by running the containers through a friends of soldiers abroad first news of those who are reported to be either killed, wounded or missing, yet it cannot well follow up these cases for the purpose of obtaining details such as relatives and friends are always anxious to obtain. Red Cross workers abroad are to obtain these as quickly as military exigencies will permit and transmit them to the Bureau of Communications. Hospitals are searched, and where it is believed the missing men may have been taken prisoners the International Red Cross at Geneva seeks verification through the German Red Cross. As the German Red Cross is desirous of obtaining reciprocal information as to German prisoners captured by the Allies. prompt attention is usually given to the requests of the American Red Cross. This information is sometimes received in as short a time as one week, but usually the interval is five or six weeks. With the constantly increasing number of American soldiers in Europe the more important does the service of the bu-

NEW 400,000 CANDLEPOWER FLARE AIDS NIGHT BOMBING

New Target Light Has High Degree of

Perfection An airplane flare with a brilliancy equalling that of 400,000 candles has been perfected. When hanging from its parachute over a German munition plant it lights up an area so brightly that an airman, thousands of feet in the air, can select any building he is directed to make a target for his aerial bomb, and it may be added. American aviators become so expert in bombing that they can usually hit the target at which they

In every European city within the zone of aerial raiding operations, the rule is rigidly enforced against the burning of lights in any building that Therefore, the airman must be able to supply his own means of locating the object of this attack.

Cities Are Charted

When orders are received to bomb, say a particular railroad center, the aviator proceeds very much in the same manner as does the captain of a vessel. The cities and their environs are charted and the night-flyer proceeds by compass due allowance, of course, being made for atmospheric conditions. He is also frequently aided by prominent markings. such as the reflection of moonlight from

Having reached the particular district sought, he must locate the particular object of his attack from his position, which may be 5,000 or 10,000 feet, or even higher, above the earth. Equipped with the airplane flare, the aviator pulls a lever and releases it. As it drops, the resistance offered by the air sets the fuse mechanism in operation. The result is the emission of a powerful light of from 300,000 to 400,000 candlepower. which completely illuminates the terrain below. The amount of light given is equal to that of a battery of from 150 to 175 street arc lamps, or of from 15,-000 to 17.500 ordinary incandescent lamp bulbs such as are used in the home. Parachute Holds Light In Suspension

As soon as the flare gets into operation a large parachute made of the best quality of silk opens and holds the bruliant light in suspension in the air for a sufficient time to allow the aviator to select his objective or target. Having located the factory, railroad depot, ammunition dump, hangars, munition plant, or whatever the target may be, the aviator drops the bomb and proceeds on his way.

The height at which an aviator flies when attacking depends, of course, on surrounding conditions. If the enemy is aware of his presence and is preparing for attack, he must keep up and out or range of anti-aircraft guns. An idea of the effective light thrown on the ground this flare may be gained from the An organization intended to bring fact that, when suspended at a height of from 1,500 to 2,000 feet, it will clearly light a circular area one and a half lished in Washington under the name of miles in diameter. When on a bombing raid an aviator seldom flies at such a low height, more generally keeping 5,000 feet or more above ground, in which case the effectively lighted area is of course diminished.

A. E. F. FOOD CONTAINERS

The Quartermaster's Department of the Army is now supplying gas-proof food containers to the soldiers in the zone of operations in France. These containers prevent seepage of gas and guard against contamination of the

The men carry their emergency rations in the containers, and all food brought up to the trenches is carried in the new tins.

After the food is packed in the containers they are hermetically scaled. It is planned to use paraffin for this purpose, as it settles in the crevices in such a way that it must be cut before the tonments. While the War Department lids can be taken off. It can be applied parassin bath.

Realizing that the supply of tin is limited and that there may not be enough to supply the needs of the Army as rapidly as it is needed, the Quartermaster's Department is experimenting with the wax-paper box. Tests made show that these boxes meet conditions satisfactorily. The tins and boxes are both vermin and water proof.

YELLOW STREAK" CARDS FOR THE UNPATRIOTIC

"Yellow-streak" cards have been printed at Atlanta, Georgia, by the Kiwannis Chub, which are to be handed to anyone attacking the Administration, the Army, Navy, or any branch of the United States Government which is working to win the war. These cards bear the following inscription:

"Nail German Lies: "Under present conditions any man who attacks any branch of our Gov ernment has a vellow streak!" Diagonally across the card is a broad

band of yellow.

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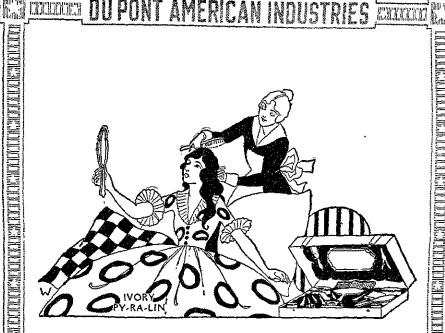
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TWO FORMER FRIENDS OF ARLO BATES PAY TRIBUTES TO LATE, INSTITUTE PROFESSOR

(By "A Life-Long Friend" and J. E. Chamberlain in the Boston Transcript)

know him intimately the death of Arlo Bates brings an indescribable sense of desolation and loneliness. The withdrawal of that vital and many-sided personality leaves a void that cannot easily be filled. The wide range of his external interests, and the serene if somewhat sombre philosophy of his in-ner life, were alike rare and note-

Coming as he did through a long line of English and New England ancestry, he inherited the Puritan intensity of spirit but without the Puritan limitatons of outlook. He had emancipated himself from the theological formulas of his early years, but he could not emancipate himself from the Puritan loyalty of spirit, the absolute fidelity to convictions, the contemptuous scorn of sham and pretense in whatever form | And few teachers of literature, and |in tropical countries. It will be rethey might appear. Genuineness, sincerity of thought and purpose counted for more than aught else in his appraisal of character.

It was sometimes said of him that his attitude toward life and his fellowmen was tinged with cynicism. In the makeup of his intellectual and moral nature there was the degree of cynicism that a chemist in a physical analysis may report (as a "trace." But Mr. Bates was in no sense a cynic. His interests were too broad, his appreciations too instinctive, his sympathies too generous to allow the seed of cynicism to take root.

He dearly loved an epigram. The winged phrase that sped straight to its mark seemed to him as legitimate as the cumbrous, qualified announcement of a truth-and more effective. He was a remarkable conversationalist, not infrequently becoming in his talk as autoalways gave his listener a chance in the end. And often these declarations because they represented his matured convictions, but because he thus clari-

fied the subject for his own mind.

His ever-present sense of humor truly mourned.

THE FRONT-CAMP HUMPHREYS

How the Army Engineers at Camp Humphreys, Va., are preparing to take steps when they arrive in France to "blow the Boche across the Rhine," as one enthusiastic engineer expressed it, is told by Lieut. Jay P. Wood, N. A., in a recent issue of The Castle, the excellent paper published at the camp by the Engineers. The school of military training, under Capt. H. D. Trounce, has been rapidly bringing to completion the poses, the article explans. The course for fifty officers and fifty non-commissioned officers began August 3rd and was to continue for two weeks, while the course for 200 enlisted men was to last four weeks. As fast as officers and terrible. The shock of the "blows" was men complete their training they are to join replacement divisions overseas. where they will have opportunities of applying their practical knowledge in against the Germans. operations Trenches, tunnels, shafts and dugouts are spreading over and under various sections. So many curious questions have been asked about the two 100-foot diameter circular trenches with pits in their centers that evidently have been thought to be some new type of fortification. Listening circles is what they are, used for preliminary training work. with underground listening apparatus. They may later be converted into redoubts and incorported into the trench system. Nearby three tunnels are being driven in whose branching galleries Lieut. W. W. Foard will carry on this way very necessary training underground, with geophones and microphones. under the same conditions as obtained at the front. These delicately sensitive instruments and appliances locate the direction and distance of enemy working parties in the different branches of neighboring galleries. Specialized surveying to meet the conditions of underground front line work will be another feature of this part of the

Military Explosives Lecture

Lieut, S. H. Pierson lectures on "Military Explosives," and demonstrates in the field the methods of using modern military explosives such as ammonal, guncotton, T. N. T., nitrostarch, dyniites and black blasting powder. Ammoral is a new explosive first used by the British. It was this explosive that wreaked such terrible havoc among the Ridge in July, 1917, by almost eliminat- | in France and on the seas. ing ridge as well as the Germans. More than 950,000 pounds were fired simul- save, save, save.

perplexities of a troublous life. Every and adaptability of the overseas cap for suggestion of fun, every delicate nuance of humor in life or in literature, called from him an instant and wholehearted response. He loved the little things, the modest qualities, the unassuming virtues in literature, as well as the great canvas crowded with figures.

Aside from the main path of his activity he found relaxation and pleasure which deepened into serious interest in overseas cap for use by our men in the the Indian shell-heaps and kitchen middens of the Atlantic coast. His collection of Indian implements, flints and pottery was probably as fine in quality and as complete as any private collection in New England.

But the joy of his working life was found in the study of literature. To this everything was made to contribute. still fewer writers were so imbued as called that some extensive experiments he with the spiritual riches of the noble literature embodied in our English ongue. No Tech students sat through his lectures listless and inattentive. Epigram and illustration and application and paradox clothed the subject with a new interest and meaning in his lecture room; literature was transformed from a polite recreation into a vital working influence. Every man felt it, and his students have carried hour and beyond their student days into the problems and experiences of life.

Mr. Bates's own literary work in the field of fiction and of poetry has been considered elsewhere, but it may properly be said here that if one wishes to get at the core of his ethical system, the central principle from which developed the austere but ardent philosophy by which his own life was shaped, he frequently becoming in his talk as auto-eratic as Dr. Johnson himself, but he "The Torch Bearer," read by Mr. Bates at the centennial anniversary of the incorporation of Bowdoin College, his were given their dogmatic form, not alma mater, in 1894. In its nobility of spirit, its splendid loyalty to ideals, it worthily represents the writer and the man whose death is so widely and so

> taneously, all distributed in gigantic T. N. T. is the accepted Government explosive and will be used to a large extent as it is an explosive of terrible force and at the same time very convenient and safe to handle. The other explosives also play an important part in the course and will be used extensively. For the edification of officers who at tend, mines will be blown up, running from a depth of five feet to fifty feet, with charges of from fifty pounds to 10,000 pounds of high explosives. Quite recently, under supervision of Captain Trounce, American ammonal was tested out in mines at Camp Dix. Mines were laid at varying depths of from twenty to sixty feet and loaded with charges up to 6,000 pounds of both American ammonal and T

The explosion was both interesting and felt for ten miles around the country. side. Across the gulch from the camp four more tunnels are steadily advancing in the direction of the gas area.

Intensive Gas Work

Men who are being trained in the use of breathing apparatus will work in these tunnels, shafts and rooms, in smoke and gas under the same conditions as they will meet at the front. Instruction is also to be given in articial resuscitation, together with the administration of oxygen by the oxygen inhalator. Other tunnels will be used for instruction in tunneling and timber-Mined dugouts are another important phase of the course of instruc-To furnish the proper atmosphere a surrounding system of trenches is being constructed forming a strong point, which will be connected up with the school of fortifications. From the trenches of this reduit mined dugouts are being excavated illustrating the various types of construction used at the front, both in timbering and in arrangement of rooms and bunks. Camouflage, being the work of all branches of the Service and not of special troops alone, will be exemplified in the protection from direct and airplane observation, of tunnel entrances, shafts and dugouts while under construction. Second Lieutenant Mosier has this important work in charge.

every man, woman, and child of the 9.720 tons, and this increased in 1917 to Nation in war-savings service. an individual buys war-savings stamps about twelve per cent of the normal he enlists in the production division of supply. the Nation, thereby supporting and Germans in the battle of Messines backing up the fighting division which is

The philosophy of the W. S. S. is

OVERSEAS CAP WILL NOT SUPERSEDE CAMPAIGN HAT

Every now and then somebody publishes a statement that the overseas cap is likely to supersede the campaign hat To those who were privileged to served to relieve and illuminate the throughout the Army. While the value the service for which it is now the authorized headgear is recognized there is no possibility that the Campaign hat will be abandoned at present. The campaign hat with its wide brim was adopted after long years of study and experience as the best available hat for Army use generally in the United States and in a very unusual acquaintance with the in the Islands. It is unnecessary to rebotany of New England, and a diversion mind anyone of the unfitness of the hotter climates of the United States especially in the desert country of the Southwest where a very large part of our Army now in this country is likely to remain for some time to come. Discussion of the Army headgear question has brought out a few advocates of the adoption of a helmet somewhat similar in type to that worn by British troops were made with helmets during the earlier years of American occupation in the Philippines but the consensus of opinion was finally against the use of the helmet and the campaign hat was retained. There is every reason to believe that the overseas cap which is being made in quantities for use in France by the A. E. F. will be retained for that service, and it may be issued to troops immediately destined for serthat influence with them beyond the vice abroad; but the old familiar and useful campaign hat is likely to remain with us in most sections of the United States as a part of the American soldier's uniform for a great many years to come, or until something that will prove a material improvement upon it

Overseas Cap for Marines

The U.S. Marines in France are wearng the overseas cap as is issued to them y the Army. It is not intended at this time to adopt the overseas cap for home or tropical use. The cap used in France is being furnished in the forestry or winter field service cloth and in the khaki material. There is a possibility that the overseas cap may be adopted for use of Marines on ships. Samples have been made, it being proposed to provide a blue cap for cold weather and a white one for warm weather.

ARMY BANDS TO BE AUGMENTED

The recently announced decision of the var department to increase army bands to forty-nine men and to grant commissions to their leaders is most gratifying to all who realize what an inspiration good band music is to the soldier. The ineffectiveness of bands organized under former conditions never failed to impress those who realized that the military band might be made to produce artistic results worthy of comparison tras; but the impossibility of securing such results under existing limitations was more than were made apparent the moment our bands began to arrive in France, and were brought into comparisen with those of the French army. which for years had enjoyed superior advantages as to organization, numbers and methods of training and adminis-

MOVABLE BRITISH ARMY BAKERY

One of the mechanical wonders of the war is the moving bakery used by the British. This is a nortable machine capable of mixing the flour into dough, moulding the dough and dividing it into predetermined weights, which can be regulated by the simple move ment of a handwheel. The machine is mounted on a specially constructed motor truck so that it can follow the troops. With a crew of five men it will make 6,000 loaves of any size, shape, or weight in one hour. This is the same amount of work which formerly required 112 army bakers mixing bread in the field by hand.

1919 POTASH SUPPLY SHORT

Experts believe that there is no chance for the United States to get the amount of potash needed to meet demands next year. Estimates for 1918 show that there should be 150,000 tons K2O, or from 400,000 to 500,000 tons of potash salts. This is only about halt of the normal imports before the war. Commercial fertilizer concerns must bear the brunt of the shortage. In 1916 The Government wishes to enlist there was a domestic production of When 126,577 tons. This output for 1917 was

> If the men in our Army and Navy can do without luxuries we at home certainly can. How many W. S. S. have

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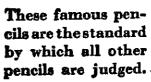
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